



Treasury Chambers, Parliament Street, SW1P 3AG

Rt Hon Michael Heseltine MP
Secretary of State
Ministry of Defence
Main Building
Whitehall
London SW1A 2HB

11 May 1983

Dear Secretary of State,

A DEFENCE SUPPRESSION WEAPON FOR THE RAF

Thank you for your letter of 10 May. I agree that the choice of DS weapon is important. For that reason I do not think that a choice between HARM and ALARM should be made without full consideration, in particular of the possible impact on our defence exports to the US (see below).

I am not convinced by the arguments that you advance in favour of ALARM. You refer to some of my concerns in your letter and its attached paper, but to my mind the balance of argument points the other way:

- i) I understand that MOD's Operational Requirements Committee, and not only the RAF, attached great importance to the earliest possible in-service date. Indeed it makes a nonsense of our massive investment in Tornado and associated weapon systems such as JP233 if they are not to be given a DS weapon as soon as possible.
- ii) There is considerable risk of slippage in the ALARM programme. Indeed MOD's Defence Equipment Policy Committee endorsed your experts' assessment that BAe's programme for ALARM was much too compressed, and that it had to be extended by perhaps 2 years to have the same credibility as the HARM programme. Such a delay would put the in-service date back to August 1989 (compared with September 1986 for HARM).
- iii) The risks of cost escalation are also unsymmetrical. Although BAe's fixed price should in principle secure your position against cost increases, the expected slippage would, I understand, cost BAe some £60-70 million. It could be anticipated that the company would seek every possible opportunity to overturn the fixed price; an exercise

in which they would almost certainly be successful. Indeed, I am somewhat concerned about the proposed contract arrangements with BAe; in normal circumstances it would be thought highly inadvisable to have a fixed price contract for such a risky programme.

iv) The cost differential between HARM and ALARM, however high it turned out to be, would be a direct charge on the defence budget. Our defence capability in other areas would inevitably suffer; as you note, the RAF could be starved of funds for other crucial defence suppression projects.

v) You make something of the direct employment effect in the UK of a purchase of ALARM. However, leaving aside the longer term effect on jobs, of paying a substantial premium to British firms, a purchase of HARM under the Co-Production option with Lucas would also mean jobs in the aerospace industry; and your spending the £200 million or so that would be saved by this option would have a further direct impact on jobs

vi) I note the emphasis you put on maintaining our technology base. But I am surprised by the importance suddenly attached to the particular capabilities that you mention; neither have in the past been put forward as essential. If nevertheless we regard homing head and guided missile technology as essential, why did we ever invite competitive bids? But, as your paper implies, there would anyway be a way forward were HARM selected. A combination of work on the short range anti radiation missile, and supporting technology may be less satisfactory in some respects; but it would be much cheaper and perhaps do more to keep open our options for the 1990s. Moreover, as Francis Pym pointed out earlier this month, there must be some scope for avoiding wasteful duplication of defence capabilities in the Western Alliance.

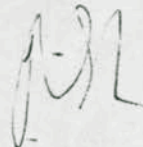
In view of these arguments, I cannot agree to your announcing a decision in favour of ALARM next Monday without further discussion. I would be willing to attend a meeting of OD if one could be arranged in the remainder of this week; that would give an opportunity to address the points above and also explore the RAF's operational needs.

But I am also concerned about the timing of an announcement for ALARM. Not only might it look a little odd so close to an election. It could produce an adverse reaction in the US at a most damaging time, just before Williamsburg. This must be a real risk. I understand that US officials and companies regard our decision on a DS weapon as something of a test case for our attitude to the two way street. The choice of ALARM would cut the ground from under the feet of those in the US (who include Casper Weinberger

and General Bernard Rogers) who have warned Congress that its attitude has been damaging US relations with Europe. If we act to confirm Congress in its attitude we must expect damage to our own sales and collaborative prospects; this could well extend beyond Martin Baker ejector seats to major projects such as the BAe Hawk and the use of Rolls Royce engines in the advanced Harrier/AV8B. I am sure we need to weigh these risks very carefully before reaching any decision.

I am copying this letter to the Prime Minister, other OD colleagues, Patrick Jenkin and Sir Robert Armstrong.

yours sincerely



for LEON BRITTAN
(approved by the Chief
Secretary & signed - his
absence)

21 MAY 1983



Letter approved by CST. Typed version to follow.

~~Draft~~ letter from: Chief Secretary
to: Secretary of State for Defence

copies to: Prime Minister
OD
Secretary of State for Industry
Sir Robert Armstrong

A DEFENCE SUPPRESSION WEAPON FOR THE RAF

Thank you for your letter of 10 May. I agree that the choice of DS weapon is important. For that reason I do not think that a choice between HARM and ALARM should be made without full consideration, in particular of the points raised in our letter of 4 June 1986 (US (sub)).

I am not convinced by the arguments that you advance in favour of ALARM. You refer to some of my concerns in your letter and its attached paper, but to my mind the balance of argument points the other way:

i) I understand that MOD's Operational Requirements Committee, and not only the RAF, attached great importance to the earliest possible in-service date. Indeed it makes a nonsense of our massive investment in Tornado and associated weapon systems such as JP233 if they are not to be given a DS weapon as soon as possible.

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TOTAL COST OF HARM/ALARM OPTIONS PRESENTED ON A DISCOUNTED CASH FLOW BASIS

ANNEX B

(includes running costs and intramural costs but excluding sunk costs)

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Option (a)	Total Programme Cost (£M)		Cost Sensitivities (c)	Other Cost Factors (d)
	@ Aug 82 EC	NPV at 5% discount factor (b)		
750 HARM (FMS)	252.4	202.7	<p>a. Dollar expenditure represents 86% of the total spend. A movement of + 5% in exchange rates would vary the NPV between £194M-£211M.</p> <p>b. A successful application for waiver of levies could reduce FMS costs.</p>	<p>a. Costs are subject to prices eventually agreed between the US Government and the contractor.</p> <p>b. Cost could be affected by USG second sourcing.</p>
750 HARM (COPROD)	282.5	219.8	<p>a. Dollar expenditure represents 54% of the total spend. A movement of + 5% in exchange rates would vary the NPV between £211M-£227M.</p> <p>b. A successful application for waiver of levies could reduce cost.</p> <p>c. The majority of the TI/Lucas offer is fixed price and there is unlikely to be a wide disparity from the costs quoted in the offer.</p>	<p>a. FMS part of offer is subject to prices eventually agreed between USG and the contractor.</p> <p>b. Cost could be affected by USG second sourcing.</p>
750 ALARM	411.1	344.4	<p>As the majority of the BAeDG offer is fixed price there is unlikely to be a wide disparity from the costs quoted in the offer.</p>	<p>a. Potential delay in the programme assessed by MOD could affect costs other than those in fixed price offer.</p>

* A constant real exchange rate over the whole period of + 5% of the central assumption is broadly equivalent to a gradual change in the real exchange rate of 10% over a 10 year period.

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iii) The risks of cost escalation are also unsymmetrical. Although BAe's fixed price should in principle secure your position against cost increases, the expected slippage would, I understand, cost BAe some £60-70 million. It could be anticipated that the company would seek every possible opportunity to overturn the fixed price; an exercise in which they would almost certainly be successful. indeed, I am somewhat concerned about the proposed contract arrangements with BAe; in normal circumstances it would be thought highly inadvisable to have a fixed price contract for such a risky programme.

iv) The cost differential between HARM and ALARM, however high it turned out to be, would be a direct charge on the defence budget. Our defence capability in other areas would inevitably suffer; as you note, the RAF could be starved of funds for other crucial defence suppression projects.

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implies, there would anyway be a way forward were HARM selected. A combination of work on the short range anti radiation missile, and supporting technology may be less satisfactory in some respects; but it would be much cheaper and perhaps do more to keep open our options for the 1990s. (Moreover, as Francis Pym pointed out earlier this month, there must be some scope for avoiding wasteful duplication of defence capabilities in the Western Alliance).

In view of these arguments, I cannot agree to your announcing a decision in favour of ALARM next Monday without further discussion. I would be willing to attend a meeting of OD if one could be arranged in the remainder of this week; that would give an opportunity to address the points above and also explore the RAF's operational needs.

But I am also concerned about the timing of an announcement for ALARM. Not only might it look a little odd so close to an election, it could produce an adverse reaction in the US at a most inappropriate time, just before Williamsburg. *This must be a real risk. There must indeed be a risk of an extremely damaging reaction.* I understand that US officials and companies regard our decision on a DS weapon as something of a test case for our attitude to the two way street. The choice of ALARM would cut the ground from under the feet of those in the US (who include Casper Weiberger and General Bernard Rogers) who have warned Congress that its attitude has been damaging US relations with Europe. If we act to confirm Congress in its attitude we must expect damage to our own sales and collaborative prospects; this could ^{well} extend beyond Martin Baker ejector seats to major projects such as the BAe Hawk and the use of Rolls Royce engines in the advanced Harrier/AV8B. *I am sure we need to weigh these risks very carefully before reaching any decision.*

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1 MAY 1983